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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,024	11/14/2003	Atsufumi Ozaki	ACO 367	2861
23581	7590	08/16/2005		
KOLISCH HARTWELL, P.C. 520 S.W. YAMHILL STREET SUITE 200 PORTLAND, OR 97204			EXAMINER ALI, HYDER	
			ART UNIT	PAPER NUMBER
			3747	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,024

Applicant(s)

OZAKI ET AL.

Examiner

HYDER ALI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9 and 11-21 is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/16/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Inventorship

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 1. Claims 1-3,5 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanno (US 6,752,672) in view of Jones (US 4,294,203).**

Kanno discloses an engine for a personal watercraft comprising an open-looped cooling system configured to take in water from outside the watercraft, for use as cooling water to cool the engine and there after discharge the cooling water outside the watercraft (**col. 7, lines 54-58**); a cylinder block 64 having a water jacket 152 formed inside thereof, the water jacket 152 being coupled to the open looped cooling system such that the cooling water flows through the water jacket 152; and a piston that reciprocates within the cylinder block 64 (**col. 8, lines 4-6**).

Kanno does not disclose dimension of the water jacket 152 in a reciprocation direction of the piston is equal to or less than a half of a reciprocation distance of the piston. However, **Jones** discloses dimension of the water jacket 34 in a reciprocation direction of the piston is equal to or less than a half of a reciprocation distance of the piston. It would have been obvious to a person having ordinary skill in the art to modify **Kanno** by employing dimension of the water jacket 34 in a reciprocation direction of the piston is equal to or less than a half of a reciprocation distance of the piston as taught by **Jones** in order to provide watercraft with a water jacket having dimension in a reciprocation direction of the piston is equal to or less than a half of a reciprocation distance of the piston.

With regard to **Claim 2**, **Kanno** discloses a cylinder head 70 provided on the cylinder block 64 and configured to form a combustion chamber, wherein the water jacket is provided in an end portion of the cylinder block on the cylinder head side so as to surround the piston.

With regard to **Claim 3**, **Kanno** discloses the water jacket is configured to open in an end face of the cylinder block on the cylinder head side.

With regard to **Claim 5**, **Kanno** discloses the piston is configured to reciprocate according to a four stroke cycle.

With regard to **Claim 22**, **Kanno** discloses the cylinder block includes a non-removable wall surrounding a chamber within which the piston reciprocates, the wall being formed intermediate the water jacket and the chamber.

2. Claims 1-3,5 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (US 6,793,546) in view of Jones (US 4,294,203).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Matsuda discloses an engine for a personal watercraft comprising an open-looped cooling system configured to take in water from outside the watercraft, for use as cooling water to cool the engine and there after discharge the cooling water outside the watercraft; a cylinder block Cb having a water jacket Wj3 formed inside thereof, the water jacket being coupled to the open looped cooling system such that the cooling water flows through the water jacket; and a piston that reciprocates within the cylinder block 64.

Matsuda does not disclose dimension of the water jacket in a reciprocation direction of the piston is equal to or less than a half of a reciprocation distance of the

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piston. However, **Jones** discloses dimension of the water jacket 34 in a reciprocation direction of the piston is equal to or less than a half of a reciprocation distance of the piston. It would have been obvious to a person having ordinary skill in the art to modify **Matsuda** by employing dimension of the water jacket 34 in a reciprocation direction of the piston is equal to or less than a half of a reciprocation distance of the piston as taught by **Jones** in order to provide watercraft with a water jacket having dimension in a reciprocation direction of the piston is equal to or less than a half of a reciprocation distance of the piston.

With regard to **Claim 2**, **Matsuda** discloses a cylinder head Ch provided on the cylinder block Cb and configured to form a combustion chamber, wherein the water jacket is provided in an end portion of the cylinder block on the cylinder head side so as to surround the piston.

With regard to **Claim 3**, **Matsuda** discloses the water jacket is configured to open in an end face of the cylinder block on the cylinder head side.

With regard to **Claim 5**, **Matsuda** discloses the piston is configured to reciprocate according to a four stroke cycle.

With regard to **Claim 22**, **Matsuda** discloses the cylinder block includes a non-removable wall surrounding a chamber within which the piston reciprocates, the wall being formed intermediate the water jacket and the chamber.

Allowable Subject Matter

Claims 6-9 and 11-21 are allowed.

Response to Arguments

Applicant's arguments filed 5/16/05 have been fully considered but they are not persuasive. Applicant's argument on page 10, lines 12-14, that "it would be illogical to suggest that the engine of Jones would use an open loop cooling system which continuously takes in cooling water from a body of water during travel, because automobiles do not generally travel on water" are not persuasive because **Examiner** is modifying watercraft engine of Matsuda by employing the teaching of Jones in order to provide a watercraft engine with water jacket having reduced dimensions in a reciprocation direction of a piston.

Conclusion

Applicant's amendment necessitated the rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HYDER ALI whose telephone number is (571) 272-4836. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY YUEN can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ha



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